

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method of determining the acoustical transfer impedance Z_t between a first position and a listening position of a human being, the method comprising

- generating an acoustical volume velocity Q in the listening position,
- measuring a response quantity p at the first position resulting from the volume velocity Q , and
- determining the acoustical transfer impedance Z_t as the response quantity p divided by the acoustical volume velocity Q , $Z_t = p/Q$,

characterized in that

the acoustical volume velocity Q is generated using a simulator (10) simulating acoustic properties of at least a head of a human being, the simulator comprising a simulated human ear (14, 15) with an orifice in the simulated head and a sound source (30) in the simulator (10) for outputting the acoustical volume velocity Q through the orifice, so as to generate a sound field around the simulator that simulates a sound field around a human being.

2. (Original) A method according to claim 1, wherein the simulator simulates the head (13) and a torso (11) of a human being.

3. (Original) A method according to claim 1, wherein the simulator comprises a sound source (30) in the interior of the simulator and a pair of microphones (M_1 , M_2 ; M_3 , M_4) arranged to measure a pair of sound pressures in a canal (18) leading from the sound source to the orifice, and that the method further comprises determining the volume velocity Q based on the pair of sound pressures.

4. (Original) A method according to claim 1, wherein the response quantity is sound pressure.

5. (Currently Amended) A method according to claim 1, wherein measuring the response quantity is vibration velocity or vibration acceleration comprises at least one of measuring a sound pressure by at least one microphone and measuring structural vibrations by at least one vibration sensor.

6. (Currently Amended) A simulator (10) for use with the method according to claim 1 and simulating acoustic properties of at least a head of a human being, the simulator comprising a simulated human ear (14, 15) with an orifice in the simulated head and a sound source (30) in the simulator (10) for outputting the acoustical volume velocity Q through the orifice, so as to generate a sound field around the simulator that simulates a sound field around a human being.

7. (Original) A simulator (10) according to claim 6, wherein the simulator simulates the head (13) and a torso (11) of a human being.

8. (Original) A simulator (10) according to any claim 6, wherein the simulator comprises two orifices simulating a left ear (14) and right ear (15) respectively of the simulated human being.

9. (Original) A simulator according to claim 8, wherein means (19) are provided for selectively outputting sound signals through the simulated left ear (14) or through the simulated right ear (15).

10. (Original) A simulator according to claim 6, wherein the simulator comprises means (M1, M2; M3, M4) for measuring the sound output from the simulated ears (14, 15).

11. (Original) A simulator according to claim 10, wherein the means for measuring the sound output from the simulated ears (14, 15) comprises a pair of microphones (M1, M2; M3, M4) for measuring the output sound volume velocity.

12. (Currently Amended) A simulator (10) for use with the method according to claim 2 and simulating acoustic properties of at least a head of a human being, the simulator comprising a simulated human ear (14, 15) with an orifice in the simulated head and a sound source (30) in the simulator (10) for outputting the acoustical volume velocity Q through the orifice, so as to generate a sound field around the simulator that simulates a sound field around a human being.

13. (Currently Amended) A simulator (10) for use with the method according to claim 3 and simulating acoustic properties of at least a head of a human being, the simulator comprising a simulated human ear (14, 15) with an orifice in the simulated head and a sound source (30) in the simulator (10) for outputting the acoustical volume velocity Q through the orifice, so as to generate a sound field around the simulator that simulates a sound field around a human being.

14. (Currently Amended) A simulator (10) for use with the method according to claim 4 and simulating acoustic properties of at least a head of a human being, the simulator comprising a simulated human ear (14, 15) with an orifice in the simulated head and a sound source (30) in the simulator (10) for outputting the acoustical volume velocity Q through the orifice, so as to generate a sound field around the simulator that simulates a sound field around a human being.

15. (Previously Presented) A simulator (10) for use with the method according to claim 5 and simulating acoustic properties of at least a head of a human being, the simulator comprising a simulated human ear (14, 15) with an orifice in the simulated head and a sound source (30) in the simulator (10) for outputting the acoustical volume velocity Q through the orifice.